

H.R. 2051
AS AMENDED BY THE SUBCOMMITTEE ON
RESEARCH
ON DECEMBER 12, 2001

Strike all after the enacting clause and insert the following:

1 SECTION 1. DEFINITIONS.

2 In this Act—

3 (1) the term “Director” means the Director of
4 the National Science Foundation;

5 (2) the term “institution of higher education”
6 has the meaning given such term in section 101 of
7 the Higher Education Act of 1965 (20 U.S.C.
8 1001); and

9 (3) the term “nonprofit organization” means a
10 nonprofit research institute or a nonprofit associa-
11 tion with experience and capability in plant bio-
12 technology research as determined by the Director.

13 SEC. 2. MATCHING FUNDS.

14 The Director may establish matching fund require-
15 ments for grantees to receive grants under this Act.

1 **SEC. 3. PLANT GENOME AND GENE EXPRESSION RESEARCH**
2 **CENTERS.**

3 (a) IN GENERAL.—The Director shall award grants
4 to consortia of institutions of higher education or non-
5 profit organizations (or both) to establish regional plant
6 genome and gene expression research centers. Grants shall
7 be awarded under this section on a merit-reviewed, com-
8 petitive basis. When making awards, the Director shall,
9 to the extent practicable, ensure that the program created
10 by this section examines as many different agricultural en-
11 vironments as possible.

12 (b) PURPOSE.—The purpose of the centers estab-
13 lished pursuant to subsection (a) shall be to conduct re-
14 search in plant genomics and plant gene expression. A cen-
15 ter's activities may include—

16 (1) basic plant genomics research and genomics
17 applications, including those related to cultivation of
18 crops in extreme environments and to cultivation of
19 crops with reduced reliance on fertilizer;

20 (2) basic research that will contribute to the de-
21 velopment or use of innovative plant-derived prod-
22 ucts;

23 (3) basic research on alternative uses for plants
24 and plant materials, including the use of plants as
25 renewable feedstock for alternative energy produc-

1 tion and nonpetroleum-based industrial chemicals
2 and precursors; and
3 (4) basic research and dissemination of infor-
4 mation on the ecological and other consequences of
5 genetically engineered plants.

6 **SEC. 4. PARTNERSHIPS FOR PLANT BIOTECHNOLOGY IN**
7 **THE DEVELOPING WORLD.**

8 (a) IN GENERAL.—(1) The Director shall award
9 grants to institutions of higher education, nonprofit orga-
10 nizations, or consortia of such entities to establish re-
11 search partnerships for supporting the development of
12 plant biotechnology targeted to the needs of the developing
13 world. The Director, by means of outreach, shall encour-
14 age inclusion of Historically Black Colleges or Univer-
15 sities, Hispanic-serving institutions, or tribal colleges or
16 universities in consortia that enter into such partnerships.

17 (2) In order to be eligible to receive a grant under
18 this section, an institution of higher education or eligible
19 nonprofit organization (or consortium thereof) shall enter
20 into a partnership with one or more research institutions
21 in one or more developing nations and may also include
22 for-profit companies involved in plant biotechnology.

23 (3) Grants under this section shall be awarded on a
24 merit-reviewed competitive basis.

1 (b) PURPOSE.—Grants awarded under this section
2 shall be used for support of research in plant bio-
3 technology targeted to the needs of the developing world.
4 Such activities may include—

5 (1) basic genomic research on crops grown in
6 the developing world;

7 (2) basic research in plant biotechnology that
8 will advance and expedite the development of im-
9 proved cultivars, including those that are pest-resist-
10 ant, produce increased yield, reduce the need for fer-
11 tilizers, or increase tolerance to stress;

12 (3) basic research that could lead to the devel-
13 opment of technologies to produce pharmaceutical
14 compounds such as vaccines and medications in
15 plants that can be grown in the developing world;
16 and

17 (4) research on the impact of plant bio-
18 technology on the social, political, economic, and en-
19 vironmental conditions in countries in the developing
20 world.

21 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

22 There are authorized to be appropriated to the Na-
23 tional Science Foundation \$9,000,000 for fiscal year
24 2002, \$13,500,000 for fiscal year 2003, and \$13,500,000
25 for fiscal year 2004 to carry out this Act.

Amend the title so as to read: “A bill to authorize the National Science Foundation to establish regional centers for the purpose of plant genome and gene expression research and development and international research partnerships for the advancement of plant biotechnology in the developing world.”.